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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,802

04/02/2007

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3413

87489 7590 05/16/2011

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EXAMINER

EGLOFF, PETER RICHARD

ART UNIT

PAPER NUMBER

3715

MAIL DATE

DELIVERY MODE

05/16/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,802	Applicant(s) DEUTSCH ET AL.	
	Examiner PETER EGLOFF	Art Unit 3715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In response to the amendment filed 01 December 2010, claims 1-33 remain pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 9-12, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams (US Patent No. 4,645,458).

Regarding claims 1-3, 9-12, 14 and 15, Williams discloses a method for sports training and testing of at least one athlete, said method comprising the steps of: initiating within a control unit (58) a predetermined protocol for training and testing, which protocol comprises layout information for locations of a plurality of remote units (light batteries) and at least one sensor (light beams), and route or game plan information for said at least one athlete relative to the plurality of remote units (column 4, lines 26-44); instructing said plurality of remote units by the control unit to produce a series of stimuli for said at least one athlete in accordance with the route or game plan information (column 3, lines 30-40); receiving feedback information from said at least one sensor associated with at least one remote unit, said feedback information associated with said at least one athlete's response to the stimuli (column 4, lines 10-25); transmitting the feedback information to said control unit; and automatically modifying further stimuli of the

Art Unit: 3715

series of stimuli having regard to the route or game plan information and the response (column 4, line 45 – column 5, line 3) (as per claim 1), the route or game plan includes one or more pre-programmed or user defined stimuli activation patterns for physical activities required of said at least one athlete (column 4, lines 26-44) (as per claim 2), the protocol further includes information about sequencing of the series of stimuli and desired actions in response required of said at least one athlete (column 4, line 45 - column 5, line 3) (as per claim 3), the feedback information is forwarded to one of said plurality of remote units before forwarding said information to the control unit (column 3, line 62 – column 4, line 9) (as per claim 9), a sports training and testing apparatus for at least one athlete, said apparatus comprising: a control unit adapted to implement a predetermined protocol, wherein the protocol comprises layout information for remote units and sensors and route or game plan information for said at least one athlete; a plurality of remote units disposed in accordance with the layout information for providing a series of stimuli for said at least one athlete in accordance with the route or game plan information; at least one sensor disposed in accordance with the layout information for providing feedback information associated with said at least one athlete's response to the stimuli to said control unit; and a communications network providing communications between the control unit and the plurality of remote units including said at least one sensor, wherein further stimuli in said series of stimuli are automatically modified having regard to the route or game plan information and the response (column 3, line 62 – column 5, line 3) (as per claim 10), the control unit is a personal computer –column 4, lines 33-37) (as per claim 11), the remote units receive instructions for producing the stimuli for said at least one athlete in accordance with the protocol from said control unit via the communications network (column 4, lines 26-44) (as per

Art Unit: 3715

claim 12), the remote units are adapted to provide visual stimuli (lights – column 3, line 56-61) (as per claim 14), and means for producing the stimuli are mounted on said remote units (light batteries) (as per claim 15).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 4-8, 13 and 16-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams (US Patent No. 4,645,458) in view of French et al. (US Patent No. 6,749,432 B2).

Regarding claims 4, 13, 19, 20 and 22, Williams discloses said protocol is a reactive sprinting and agility protocol and the method further comprises measuring said at least one athletes sprint times over a random course defined by said activation patterns (as per claim 4), however it is noted that Williams does not explicitly disclose measuring said at least one athletes reaction time upon starting the protocol (as per claim 4), the remote units include means for

Art Unit: 3715

identifying said at least one athlete (as per claim 13), said at least one sensor is a biometric sensor (as per claim 19), said at least one sensor is selected from the group including a timer, a pressure sensor, a pedometer and an accelerometer (as per claim 20), said at least one sensor is worn by said at least one athlete (as per claim 22). However, French discloses a similar system that includes measuring reaction time (column 18, lines 32-58), means for identifying at least one athlete (column 35, lines 46-55), at least one sensor is a biometric sensor (column 14, lines 48-67), an accelerometer (column 7, lines 10-17), and a sensor worn by the athlete (column 5, lines 22-33). It would have been obvious to one skilled in the art at the time of the invention to modify the teachings of Williams by including these features taught by French, with the motivation of allowing more detailed recording of the performance of the athlete.

Regarding claims 5-8, it is noted that Williams does not explicitly disclose said protocol is a reactive offensive/defensive training protocol wherein said at least one athlete includes players and the method further comprises the step of: instructing at least one offensive player through a plurality of defensive players over a random course defined by said activation patterns, wherein the plurality of defensive players are required to react to said at least one offensive player's movements without knowledge of the random course (as per claim 5), said protocol is a grid training protocol and the method further comprises the steps of: placing an array of remote units in a grid type configuration; directing a group of athletes, simultaneously or separately by stimuli specific to respective athletes, through a course indicated by said remote units wherein the course is a random course defined by said activation patterns (as per claim 6), said group reactive training protocol further comprises the step of: instructing a first player from said group of players to move to a randomly selected remote unit thereby prompting remaining players

Art Unit: 3715

within the group to initiate the most appropriate tactical move or pattern of play in response to the instructed movement (as per claim 7), said protocol is a grid training protocol and the method further comprises the steps of: placing an array of remote units in a grid type configuration; directing a group of athletes, simultaneously or separately by stimuli specific to respective athletes, through a course indicated by said remote units wherein the course is a random course defined by said activation patterns (as per claim 8). However, French's teaches a similar system where a user is confronted with virtual defensive players that react to the user, or wherein the user must intercept a virtual player, and a grid of obstacles (column 9, lines 35-56) that must be negotiated while performing the activity (column 7, line 18—column 8, line 53). Furthermore, OFFICIAL NOTICE was taken in the previous Office Action dated 07 June 2010 that both the concepts and advantages of performing live drills wherein a player or players must initiate tactical moves or patterns in response to other players were old and well known and expected in the art at the time the invention was made. Since the Applicant did not traverse the officially noticed facts by specifically pointing out supposed errors, the officially noticed facts taken in the rejection dated 07 June 2010 are now considered admitted prior art. See MPEP § 2144.03.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the teachings of Williams by using antagonist defenders/offenders along with the obstacles, as taught by French, and to use human players as the antagonists, as was well known to those of ordinary skill in the art, with the motivation of providing a more realistic sports experience for the user.

Art Unit: 3715

Regarding claims 16-18, 21 and 23-33, Williams discloses a sports training and testing system for at least one athlete, said system comprising: an on-field network having the sports training and testing apparatus of claim 10 (as per claim 23), a sports training and testing method for a user, said method comprising the steps of: initiating within a control unit a predetermined protocol for training and testing the user; instructing a plurality of remote units to produce a series of stimuli to the athlete in response to the predetermined protocol; receiving feedback information from at least one sensor, which feedback information is associated with the user's response to the stimuli; automatically modifying further stimuli of the series of stimuli having regard to the feedback information (as per claim 32), and a sports training and testing system for a user, said system comprising: an on-field network having: a control unit adapted to implement a predetermined protocol for training and/or testing the user; a plurality of remote units for providing a series of stimuli to said user in accordance with the predetermined protocol; at least one sensor for providing feedback information associated with said user's response to the stimuli to said control unit, wherein further stimuli in the series of stimuli may be automatically modified having regard to the feedback information (as per claim 33).

Williams does not explicitly disclose means for producing the stimuli are mounted separately of said remote units (as per claim 16), the remote units further include a data capture sub-unit having a memory (as per claim 17), the data capture sub-unit is adapted to receive said feedback information from the sensors before forwarding the information to said control unit (as per claim 18), said at least one sensor is integral with or coupled to one of said plurality of remote units (as per claim 21) a communications link coupling the on-field network to an off-field network, the off-field network having: a terminal for receiving from said control unit via the

Art Unit: 3715

communications link data containing the feedback information for post processing; and a memory for storing the post processed data (as per claim 23), the communication link includes a wireless link (as per claim 24), the communication link includes a wired connection (as per claim 25), the remote terminal is a computer workstation running software means for processing the data containing feedback information (as per claim 26), the remote terminal includes an Internet connection (as per claim 27), a protocol development suite for developing or modifying protocols for specific training needs of different athletes (as per claim 28), the processed data is stored in a database to enable later retrieval and analysis by a trainer or coach (as per claim 29), a trainer receives intermediate reports regarding said at least one athlete's responses compared with the responses required by the predetermined protocol (as per claim 30), the trainer modifies the protocol in real time based on said intermediate reports (as per claim 31), transmitting the feedback information across a communications link to a remote terminal; processing the received information within the remote terminal; and storing the processed information in a memory (as per claim 32), and a communications link coupling the on-field network to an off-field network, the off-field network having: a terminal for receiving from said control unit via the communications link the feedback information for post processing; and a memory for storing the post processed data (as per claim 33).

However, French's system includes embodiments wherein stimuli are mounted separately of remote units, which including a memory that receives information from the sensors and forwards it on, the sensor may be integral with remote units (column 5, lines 1-48), the required communications link coupling the on-field network to an off-field network, a communications link that may be wired or wireless, and an internet connection (column 28, lines 46-64), the

Art Unit: 3715

processed data is stored in a database, intermediate reports for monitoring the athlete, and a suite for developing protocols (column 15, lines 46-65, column 17, lines 8-14). It would have been obvious to modify the teachings of Williams by adding this network feature and other features taught by French, with the motivation of providing more detailed monitoring of the athlete performing the activities.

Response to Arguments

7. Applicant's arguments filed 01 December 2010 have been fully considered but they are not persuasive.

Applicant argues that Williams does not anticipate independent claim 1 because Williams does not provide an enabling disclosure, because it does not enable the initiation of a predetermined protocol for training and testing. However, Applicant is reminded that Williams discloses the control unit may comprise a radio transmitter controlled by a microprocessor-based computer system. One of ordinary skill in the art at the time of the Williams patent would have recognized that a microprocessor-based computer system was capable of being programmed with commands (protocols) for controlling and instructing the plurality of remote units as claimed. Furthermore, the alternative embodiment of toggle switches that can be manipulated in order to cause the control unit to control the remote units can be considered to be, and enables, a "predetermined protocol" for instructing the remote units, since the action of the user manipulating the toggle switches is a simple form of pre-programming a predetermined protocol. Therefore, since Williams discloses pre-programming the control unit in order to control the

Art Unit: 3715

remote units, Williams discloses, and enables, the feature of initiating a predetermined protocol, according to Applicant's definition of protocol.

Applicant further argues that Williams does not disclose that the protocol includes layout information for locations of the remote units, as claimed. However, according to the broadest reasonable interpretation of the claims, this “layout information” may simply be knowledge of where the remote units are located. Williams discloses that, as the athlete is engaging in the course, the as light beams are broken, the control unit causes certain light batteries to be activated in response (see column 3, lines 30-40 and column 4, line 45 - column 5, line 2). In order to perform this capability, the predetermined protocol in the control unit of Williams would necessarily have to include this claimed layout information; without this information, the control unit would not know which light battery to activate next after a certain light beam is broken by the athlete. Therefore, the layout information is inherent in the teachings of Williams.

Applicant further argues that Williams does not disclose the feature of “automatically modifying further stimuli of the series of stimuli having regard to the route or game plan information and the response” in claim 1. Applicant contends that the claimed automatic modifying is different from the feature of Williams in which the next light battery is activated in response to an indication of the user's position. However, as noted above, the unit is preprogrammed to operate independently in response to indication of the user's position. Therefore, Williams clearly discloses the feature of automatically modifying the stimuli as claimed.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Egloff whose telephone number is (571) 270-3548. The examiner can normally be reached on M-F 7:30am - 5:00 pm EDT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached at (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3715

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kathleen Mosser/
Primary Examiner, Art Unit 3715

Peter Egloff